

ORGANIZATIONAL CHANGE FOR ACQUISITION REFORM:  
PROPOSED CORE COMPETENCIES

A Research Paper

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by

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## **Disclaimer**

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the US government or the Department of Defense.

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## *Preface*

I chose to look at organizational change strategies for acquisition reform due to the enormity of the change reform required of the acquisition community. The Congress and Department of Defense have made many previous attempts at acquisition reform; most have had a limited effect. In order to make sure our current reform efforts make positive, lasting changes, we must simultaneously transform the acquisition culture. To date, I have seen little attention paid to cultural change aspects. To that end, I offer some ideas for organizations undergoing change for acquisition reform.

I would like to thank the following people for their help in this project. First I want to express my gratitude to Lt Col Mike White and Maj Heidi Beason from the Human Systems program office, Brooks Air Force Base, Texas. They served as test subjects for my interview guide development, and their comments were essential in its refinement. Also, I want to thank Mr Terry Little, Mr Oscar Soler, and the entire Joint Direct Attack Munitions program office for taking the time to talk with me. Their information was freely given and very helpful in completing this research. Any errors in interpreting their information are mine.

## *Abstract*

The post cold war environment and reduced budgets have forced the military to implement acquisition reform. While the Department of Defense has achieved some success, the pace of reform is still relatively slow and some concern exists about the reform's breadth and depth. The research presented here attempts to help matters by proposing core competencies for organizations undergoing change for acquisition reform.

These core competencies are derived from a comparison of theory with actual practice. A discussion of possible change strategies shows various methods to achieve Lewin's framework of organizational change: unfreezing the system, movement towards a new orientation, and refreezing new behaviors and attitudes. These strategies are compared with the case study of successful acquisition reform implementation in the Joint Direct Attack Munitions (JDAM) program office.

Results show a selective and tailored use of the change strategies presented. The JDAM program office placed particular emphasis on creating a sense of urgency, communicating a vision, altering key management processes, and attempting to overcome defensive reasoning. Yet, their method of employment suggests strict adherence to a particular step-by-step set of strategies may not work for other organizations.

However, the results also suggest that there are overarching core competencies for successful organizational change. These are: Creating urgency, communicating a vision, setting and meeting high standards, teamwork, and constant innovation.

## Chapter 1

### Introduction and Background

*The continuous improvement of the acquisition process that has been occurring with the DOD on an ongoing basis is no longer sufficient. We must now totally re-engineer the system.*

—Colleen Preston

Deputy Undersecretary of Defense for Acquisition Reform

Post cold war national security requirements, downsizing, and budget reductions have drastically altered the acquisition environment. To adjust to this new situation, the Department of Defense (DOD) began making major changes to the acquisition process in 1994. To date the Air Force (AF) has experienced many successes, but the pace of reform is still relatively slow and some concern exists about the reform's breadth and depth. To that end, the research presented here will try to help the situation by proposing core competencies for organizations trying to implement positive and sustained acquisition reform.

Before making this proposal, it is important to lay some groundwork. First, a brief synopsis of acquisition reform is presented. A review of prominent change strategies follows this synopsis. These strategies serve as the theory behind organizational change. This theory is then compared to actual practice by studying successful acquisition reform implementation in the Joint Direct Attack Munition (JDAM) program. Based on this

comparison, a set of core competencies for organizations undergoing drastic change is proposed. Finally, areas requiring further research are addressed at the end of this paper.

## **Acquisition Reform Background**

### **Why Reform?**

Our success in the Gulf War along with post Cold War realities leave the military in somewhat of a dichotomy. The DOD remains committed to a lean, high technology force, but faces continued budget pressure. In fiscal year (FY) 1997, defense spending will be 40% lower than FY 1985.<sup>1</sup> Moreover, the procurement budget will be 60% lower than FY 1985.<sup>2</sup>

Obtaining high technology equipment with such low budgets poses difficulties for the acquisition system. First, acquiring such systems is expensive. Hopefully the days of \$600 hammers are past. But the acquisition system still incurs large overhead costs—30%-40% compared to 10% in private industry.<sup>3</sup> The system also has long acquisition cycle times. It typically takes eight to ten years to field a system, while commercial technology takes only three to four years.<sup>4</sup> Inability to obtain state-of-the-art commercial technology exacerbates the cost and time problems. Due to complex government rules and oversight, many companies will not do business with the DOD.<sup>5</sup>

A myriad of other problems exist, but the bottom line, as stated by Secretary of Defense Perry, is: “In today’s environment the current process will not always be able to meet the Department’s need. DOD will not be able to carry out this blueprint, without dramatic changes in its acquisition processes.”<sup>6</sup> Because the acquisition system is not functioning properly, the DOD has implemented acquisition reform as a solution.

## What is Acquisition Reform?

Acquisition reform is an attempt by the DOD to re-engineer the acquisition system to meet the challenges mentioned above. The DOD has created the overall structure of reform. See Appendix A for the AF implementation of acquisition reform.

Basic DOD acquisition reform principles cover what we buy and how we buy it. New practices emphasize the use of commercial practices,<sup>7</sup> commercial specifications,<sup>8</sup> and commercial products.<sup>9</sup> New regulations also call for streamlining the acquisition process largely through government industry teamwork, simplified oversight, and process control.<sup>10</sup> The use of integrated product teams seeks to foster teamwork among personnel from different functional areas.<sup>11</sup> Furthermore, the DOD envisions a combination of regulation reduction and empowerment that will greatly assist the streamlining effort.<sup>12</sup>

## Implications of Acquisition Reform

These reform principles have a large impact on the acquisition community. Table 1 summarizes some key trends discussed above and in Appendix A.

**Table 1. Acquisition Reform Changes**

<b>Old Process and Practices</b>	<b>New Process and Practices</b>
Functional, Stovepipe	Integrated Product Teams
Us (Government) versus Them (Industry)	Teamwork, More Reliance on Contractor
Military Specifications and Practices	Commercial Specifications and Practices
Long Cycle Times	Short Cycle Times
Detailed Regulation & Micromanagement	Empowerment

Further complicating matters, the above changes are taking place in an environment of reduced funding and downsizing (personnel cuts and base closures). In addition, the acquisition community carries around the baggage of troubled programs, like the C-17, and \$600 dollar hammers.

All of this means big changes. As Table 1 indicates, the acquisition culture must do some things foreign to its nature. The culture must build trust (within and outside government) and become efficient by working smarter. It must also release some control (manage risk, not eliminate it) by pushing work to the contractor and be more agile and responsive to a rapidly changing environment.

### **Status of Acquisition Reform**

With such a large transformation at hand, what are the results thus far? As with many such endeavors, the answer to this question is not clear cut.

The AF has observed some positive statistics. Within Air Force Material Command (the AF's acquisition arm), Request for Proposal (RFP) page counts have dropped by 70% and contract data equipment lists are 77% smaller.<sup>13</sup> Also, the AF has canceled 68% of all acquisition policies with a corresponding 63% drop in acquisition policy page count. Under reform, the C-17 program appears to have overcome its troubled past and now estimates a cost avoidance of \$17 billion and a faster aircraft delivery schedule.<sup>14</sup>

However, some concern exists as to the breadth, depth, and pace of change. Also, there is a general consensus that there is a long way to go. Dr Kaminski, Undersecretary of Defense (Acquisition and Technology), commented that, "There is commitment at the top, and the bottom has embraced the need for reform—but the middle is not yet convinced."<sup>15</sup> He also recognized the need to increase the pace of reform and designated 31 May 1996 as a stand down day for the entire acquisition work force—an unprecedented step. Dr Kaminski declared, "That day will be dedicated to increasing our awareness of the acquisition reform initiatives and planning to accelerate their implementation."<sup>16</sup>

Industry leaders have also spoken out in favor of accelerating the reform. During an American Institute for Aeronautics and Astronautics (AIAA) sponsored Chief Executive Officer (CEO) Panel on acquisition reform, CEOs indicated the reform movement still needed work. The CEOs said they observed some improvement in the government oversight process, but that the change was “evolutionary rather than revolutionary.”<sup>17</sup> They also do not see any change in the effort to build trust between government and industry and thought that there was still too much paperwork in the RFP process.<sup>18</sup> Dr J. R. Sculley, former Assistant Secretary of the Army for Research, Development, and Acquisition, and current CEO of Allied Research Corporation, best captures the industry mood with this comment: “Acquisition reform has been the subject of discussion for too long. Now we need action. But, effective and efficient acquisition will happen only when there is greater personal responsibility on the part of all involved. That would be the most important contribution to reform, as Dr Kellman noted. Perhaps, that’s why many reformers see a need for cultural change in defense.”<sup>19</sup>

## Notes

<sup>1</sup>William Perry, “Mandate for Change,” 9 February 1994, 18; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq>, 1.

<sup>2</sup>Ibid., 4.

<sup>3</sup>“Pentagon Begins the Latest Acquisition Reform Battle,” *Jane’s Defence Weekly* 20, no. 2 (10 July 1993): 19.

<sup>4</sup>Perry, 3.

<sup>5</sup>Ibid., 1.

<sup>6</sup>Ibid., 1.

<sup>7</sup>Robert H. Williams, “Dr Perry Urges Radical Surgery for Acquisition,” *National Defense* 78, no. 495 (February 1994): 12.

<sup>8</sup>Paul G. Kaminski, “Acquisition Reform Acceleration Day, May 31, 1996,” *Program Manager* 25, no. 5 (September-October 1996): 30.

## Notes

<sup>9</sup>Paul G. Kaminski, Under Secretary of Defense (Acquisition and Technology), Department of Defense, memorandum to Defense Acquisition Community, subject: Update of the DOD 5000 Documents, 15 March 1996, 3.

<sup>10</sup>Perry, 11.

<sup>11</sup>William Perry, "Use of Integrated Product and Process Development and Integrated Product Teams in DOD acquisition," *Defense Acquisition Deskbook*, CD-ROM, Defense Acquisition Deskbook JPO, December 1996.

<sup>12</sup>Kaminski, memorandum, 2.

<sup>13</sup>"Lightning Bolts Ignite Acquisition Initiatives," *National Defense* 80, no. 501 (April 1996): 26.

<sup>14</sup>Darleen Druyun, "Acquisition Renaissance A Cultural Change in Work," address to the American Institute of Aeronautics and Astronautics, 17 October 1996, n.p.; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq-ref/std-dwn/culture.pdf>.

<sup>15</sup>James Laney, "Acquisition Reform: Government and Industry Speak Out," *Aerospace America* 34, no. 8 (August 1996): 40.

<sup>16</sup>Paul G. Kaminski, Under Secretary of Defense (Acquisition and Technology), Department of Defense, memorandum to Secretaries of the Military Departments, subject: Stand-Down Acquisition Reform Acceleration Day, 15 March 1996, n.p.; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq-ref/std-dwn/stddwn.html>.

<sup>17</sup>Laney, 41.

<sup>18</sup>*Ibid.*, 42.

<sup>19</sup>J. R. Sculley, "Achieving Acquisitions Reform Requires More Than New Laws," *National Defense* 81, no. 520 (September 1996): 4.

## Chapter 2

### Organizational Change Strategies

*Most managers manage for yesterday's conditions because yesterday is where they got their experiences and had their successes.*

—Professor Theodore Leavitt

Organizational change strategies offer a means to help organizations prepare for the future, so that leaders do not fall into the trap mentioned by Professor Leavitt. Note, change here means altering the organization's basic assumptions. These are the beliefs, thoughts, and feelings that the organization has taken for granted; they occur at the unconscious level.<sup>1</sup> These assumptions form the basic building blocks of culture. It is the ultimate aim of most change strategies to affect basic assumptions for meaningful, long lasting change.

To facilitate discussion, the framework laid out by Lewin is used: unfreezing the system, movement towards a new orientation, and refreezing new behaviors and attitudes.<sup>2</sup> Many types of change strategies exist, each with their own unique characteristics. However, in a general sense, most of them fall into Lewin's pattern. Their differences occur mainly with the methods various strategists employ at each of Lewin's stages. Common change methods that stand out in each stage will be examined. Where applicable, key differences will also be discussed. Note, the strategies presented here take

the perspective of the leader. In other words, what can the leader do to facilitate organizational change?

## **Unfreezing**

The first step in the change process is unfreezing. It involves the creation of disequilibrium in the system.<sup>3</sup> Essentially, anyone trying to change an organization must do something to overcome the inertia and the organization's tendency to maintain the status quo. The key elements in this stage include: crisis/urgency, vision, and overcoming initial resistance.

### **Crisis/Urgency**

Many experts say an organization must first recognize that they have a significant problem.<sup>4</sup> The process usually starts with the senior leadership. But to unfreeze the system, everyone needs to feel a sense of urgency. Initiating change is easier if some type of emergency (either internal or external to the organization) exists.<sup>5</sup> If change is important, but a crisis does not exist, the leader may want to consider establishing one to push along the change process.<sup>6</sup> The important concept is to make sure the entire organization has a sense of urgency.

### **Vision**

Research shows that establishing a vision is critical in resolving the crisis.<sup>7</sup> An appropriate vision describes the future and why people should try to create that future. In addition, it establishes direction for change and provides motivation.<sup>8</sup> Establishing a vision provides another benefit—psychological safety.<sup>9</sup> People often feel threatened by change.

A solid vision mitigates the threat by showing a path to resolve disequilibrium felt by workers. The vision is also the link to the next step, overcoming initial resistance.

### **Overcoming Initial Resistance**

The organization and the people in it will tend to resist change. Therefore, the leader must link the crisis or urgency to goals and ideals important to people. Group members must develop some sense of ownership to the problem and potential solution at hand.<sup>10</sup> Leaders facilitate this ownership process through communicating the vision and mobilizing commitment.

**Communicating Vision.** Leaders must consistently and continually communicate the organization's vision.<sup>11</sup> They should use many types of forums and ensure the message does not take on new meaning as it moves through the organization. Kotter points out that the leader must communicate the vision well.<sup>12</sup> Some tips to follow include: making the vision simple, the use of examples and metaphors, and the repetition of key ideas. Perhaps most important, the leader should explain any inconsistencies between the vision and organizational policies.<sup>13</sup> Mixed signals confuse employees and send the message that management has no real commitment to change. However, some inconsistencies may exist for good reason, like laws or resource limitations. If so, senior leadership must explain the why the inconsistencies exist.

**Mobilizing Commitment.** To overcome initial resistance, the leader must get people to begin to take some responsibility for the direction of the organization. Communicating the vision is a big step. However, other means exist to mobilize commitment. First, the leader should manage the transformation personally, not delegate it to lower level managers.<sup>14</sup> This personal commitment will show the importance of the transition. Still,

the leader needs to establish a dedicated group within the organization to provide the energy for the change.<sup>15</sup> Members of this group must hold positions of power, have expertise, and hold credibility throughout the organization.<sup>16</sup> In the process of managing the transition, the leader also needs to align power and resources in a manner consistent with the change.<sup>17</sup> Finally, making other adjustments such as changing work team composition, and altering relevant management processes should be considered.<sup>18</sup>

## **Movement**

Movement involves taking the organization from its present level to the new, desired level.<sup>19</sup> Schein speaks of redefining core concepts in the basic assumptions in this stage.<sup>20</sup> Human resource methods, education, the scope of the change, empowerment, and defensive reasoning are critical elements of the movement process. There is a fair amount of agreement on the use of various human resource methods and education. On the other hand, change strategists offer some unique perspectives on empowerment, how large to make the scope of change, and how to combat defensive reasoning. Finally, strategists also differ on whether to focus first on changing attitudes or behaviors.

### **Human Resource Methods**

Many strategies recommend using the promotion system, selection process, reward system, and the appraisal system to instill change.<sup>21</sup> The basic idea is to promote and reward things that produce the necessary change. These are powerful mechanisms. They help the leader to put the right people, doing the right thing, in the right positions. A leader should use human resource methods throughout the organization. In particular, Tichy points out that the appraisal system is key for middle management.<sup>22</sup>

## **Education**

As part of the change process, people may need to develop new skills, methods of doing business, and new concepts and thought processes. It is not reasonable to expect people to change if they are not provided the tools. Providing education and training helps in this aspect.<sup>23</sup> Also, one should not expect 20 years of habits to change with a five day training class.<sup>24</sup> Follow up training and help is key. In addition to skill and cognitive training, Kotter feels attitude training is important.<sup>25</sup> Such training can help people better support change.

## **Scope of Change**

In attempting to change an organization, one might ask whether to try across-the-board, massive change or to generate change little-by-little. There is certainly a continuum between these two endpoints. However, Kotter asserts that short term wins are critical to success.<sup>26</sup> They provide reinforcement of change concepts.<sup>27</sup> Additionally, they help sustain and build support.<sup>28</sup> Argyris also advocates starting out on small, but important, problems.<sup>29</sup> Starting out too large can drown the change process. Initiatives will lose steam, and the maintainers of the status quo will have a chance to regroup. One should observe a cautionary note here, however. The leader should identify targets and use short term wins to shape the environment for the long term goals.<sup>30</sup>

## **Empowerment**

Some of the more recent change strategies advocate empowerment.<sup>31</sup> In this context, empowerment is removing obstacles, aligning systems with the organization's vision, encouraging risk taking, and giving people the responsibility and authority to take action

on their ideas.<sup>32</sup> One would not automatically think empowerment an absolute necessity in the change process. Its use would probably depend on the basic assumptions of the organization and the desired cultural end state.

However, Kotter and Hall contend that major changes will not happen without the help of lots of people. According to Kotter, the best way to obtain this help is to empower the workers. The leader empowers by removing structural barriers, providing training, and ensuring workers have the right information. The leader should also confront bosses who undercut change.<sup>33</sup> These actions will create an environment where employees committed to the new vision can help make it happen.

### **Defensive Reasoning**

One can use all of the above elements, but Argyris contends that you must solve the problem of defensive reasoning for successful change. He defines defensive reasoning as the “thoughts and actions used to protect individuals’, groups’, and organizations’ usual ways of dealing with reality.”<sup>34</sup> Argyris characterizes it by soft data and private inferences that are not publicly testable.<sup>35</sup> Argyris further states that defensive reasoning is ingrained in our thought processes. This makes it very difficult to overcome because if one party confronts another party’s defensive reasoning, both parties tend to engage in bypass routines.<sup>36</sup> On the other hand, more subtle approaches to dealing with defensive reasoning could fail to address the problem or be perceived as being manipulative.

To overcome defensive reasoning, Argyris advocates using productive reasoning. He characterizes productive reasoning by the use of hard data, explicit premises and inferences, and publicly testable conclusions.<sup>37</sup> In short, one displays productive reasoning

by sticking to the facts, allowing the inquiry of their assumptions and beliefs, and holding out their conclusions for everyone to check.

### **Behavior versus Attitude**

Most change strategists agree on ultimately altering the basic attitudes and assumptions of culture; however, some disagreement exists on whether to focus energy on developing new attitudes *or* new behaviors during the change journey. For purposes of discussion, behavior is defined as the outward actions and thoughts of an individual. Attitudes, on the other hand, reflect things we take for granted or are only dimly aware of. In other words, attitudes occur at the basic assumption level.

In changing an organization should the leader attempt to change attitudes or behaviors? Schein argues changing behavior is necessary, but not sufficient.<sup>38</sup> He states “some cognitive redefinition of some of the core concepts in the assumption set” needs to take place.<sup>39</sup> By prescribing the attitude training, Kotter also recognizes the importance of addressing attitude changes. How does one achieve attitude change? One accomplishes it primarily through the methods already discussed. The key point is not to focus solely on behavior, forgetting the bottom line of altering people’s attitudes.

Having said this, most strategies do emphasize behavioral change. Ward says attempting to change attitude before behavior will fail.<sup>40</sup> He believes that behavior comes first for two reasons. First, people will find it less threatening.<sup>41</sup> Second, Ward says the if the leader links results to new behavior, new attitude will follow and thus lock in the new behavior and associated results.<sup>42</sup>

## **Refreezing**

The final step in the change process is refreezing; it institutionalizes the change. The goal is to ground new behavior and assumptions in the organization's culture. In order for such transformation to settle in, people must see the link between new behaviors and the organizational success. Critical elements of this stage include: grafting the new culture to the old, maintenance of the new culture, and evaluating progress towards the desired state. Additionally, elements of the previous stage continue to apply.

### **Grafting**

One common theme among experts is linking and transitioning the old culture to the new one—grafting. More than likely, the desired changes are not compatible with the old culture, but not everything is obsolete.<sup>43</sup> Therefore, the leader should “graft the new practices onto the old roots while killing off the inconsistent pieces.”<sup>44</sup>

The leader can carry out grafting through several techniques. One mechanism is publicly mourning the old culture. This will let people know that the old way of doing business served them well, but now it is time to put it to rest.<sup>45</sup> A leader should also put on public celebrations of new models and behaviors that support the vision.<sup>46</sup> People will receive confirmation of their efforts and see how improved performance is due to new practices. Finally, the leader should use the job selection process. Hiring and promoting people that fit the new mold will solidify change. Of course, the other side of this coin is de-selecting people through early retirements and firing.<sup>47</sup> Schein also mentions promoting subcultures within the organization that are in tune with the desired change.<sup>48</sup> Here, promote means elevating their status by giving them special tasks to accomplish.

## **Maintenance and Evaluation**

To ensure change takes root with the desired results, the leader must evaluate its progress. Maintenance in particular is important; the leader must continually reinforce the new culture for it to take root.

In addition to normal management maintenance and evaluation practices, one should pay special attention to information technologies and informal organization networks. New information technologies can provide tremendous capability to control the change process. The operative word here is control. Ward says developing a good management *control* system, versus a management *information* system, will help the leader keep things on track.<sup>49</sup> Gathering information from the organization's informal networks will also help one evaluate the process.<sup>50</sup> A leader can often use these networks to send and receive information faster than the normal system. Also, the leader can selectively promote these networks to help with the grafting of the new culture.

## **Previous Elements and Methods**

In the refreezing stage the leader should also continue to use the methods discussed in stage two: human resources, education, empowerment, and defensive reasoning. However, if change started incrementally, the scope should cover the entire organization by the end of stage three. A good evaluation system will help guide the leader in making decisions on how to continue to employ the above methods. As a final point, Hall also mentions that the vision needs periodic reassessment.<sup>51</sup> One should step back and see if it needs refinement. Again, feedback from evaluation will help here.

## Notes

<sup>1</sup>Edgar H. Schein, *Organizational Culture and Leadership* (San Francisco, CA: Jossey-Bass Publishers, 1992), 22.

<sup>2</sup>Kurt Lewin, "Group Decision and Social Change," in *Readings in Social Psychology*, ed. Eleanor E. Maccoby et al. (New York: Holt, Rinehart, and Winston, 1958), 210.

<sup>3</sup>*Ibid.*, 298.

<sup>4</sup>John P Kotter, *Leading Change* (Boston, MA: Harvard Business School Press, 1996), 37.

Schein, 299.

Noel M Tichy and Mary Anne Devanna, *The Transformational Leader* (New York: John Wiley & Sons, 1990), 44.

<sup>5</sup>Tichy, 47.

<sup>6</sup>Kotter, 44.

<sup>7</sup>Leon W Hall, "Six Elements for Implementing and Managing Change," *Leadership & Organizational Development Journal* 12, no. 2 (1991): 24.

Brian H Kleiner and Walter A. Corrigan, "Understanding Organisational Change," *Leadership & Organizational Development Journal* 10, no. 3 (1989): 29.

Kotter, 68.

Schein, 330.

Tichy, 126

<sup>8</sup>Kotter, 68.

<sup>9</sup>Schein, 299.

<sup>10</sup>*Ibid.*, 299.

<sup>11</sup>Hall, 25.

<sup>12</sup>Kotter, 88.

<sup>13</sup>*Ibid.*, 90.

<sup>14</sup>Tichy, 178.

<sup>15</sup>*Ibid.*, 179.

<sup>16</sup>Kotter, 57

<sup>17</sup>Kleiner and Corrigan, 29.

<sup>18</sup>Tichy, 163.

<sup>19</sup>Lewin, 211.

<sup>20</sup>Schein, 301.

<sup>21</sup>Patrick Connor, and Linda Lake, *Managing Organizational Change* (Westport, CT: Praeger, 1994), 74.

Schein, 328.

Tichy, 242.

<sup>22</sup>Tichy, 246.

<sup>23</sup>Conner and Lake, 81.

Kotter, 107.

Tichy, 162.

<sup>24</sup>Kotter, 108.

<sup>25</sup>*Ibid.*, 109.

## Notes

- <sup>26</sup>Ibid., 117.  
<sup>27</sup>Ibid., 122.  
<sup>28</sup>Ibid., 123.  
<sup>29</sup>Chris Argyris, *Strategy, Change and Defensive Routines* (Boston, MA: Pitman, 1985), 297-298.  
<sup>30</sup>Ibid., 125.  
<sup>31</sup>Kotter, 101.  
Hall, 25.  
<sup>32</sup>Kotter, 21.  
<sup>33</sup>Kotter, 115.  
<sup>34</sup>Argyris, 5.  
<sup>35</sup>Ibid., 76.  
<sup>36</sup>Ibid., 72.  
<sup>37</sup>Ibid., 262.  
<sup>38</sup>Schein, 302.  
<sup>39</sup>Ibid., 301.  
<sup>40</sup>Michael Ward, *Why Your Corporate Culture Change Isn't Working—and What To Do about It* (Brookfield, VT: Gower, 1994), 53 & 56.  
<sup>41</sup>Ibid., 53.  
<sup>42</sup>Ibid., 56.  
<sup>43</sup>Hall, 26  
Kleiner and Corrigan, 29.  
Kotter, 151.  
<sup>44</sup>Kotter, 151.  
<sup>45</sup>Kleiner, 29.  
<sup>46</sup>Hall, 26.  
<sup>47</sup>Kotter, 155.  
<sup>48</sup>Schein, 315.  
<sup>49</sup>Ward, 102.  
<sup>50</sup>Tichy, 198.  
<sup>51</sup>Hall, 26.

## **Chapter 3**

### **JDAM Case Study**

*I ask you to join me in that quest to break down the costly barriers in our system and create a new acquisition system to provide the finest equipment for our forces at a cost the nation can afford.*

—Dr William Perry  
Secretary of Defense

The JDAM system program office (SPO) embraced acquisition reform, breaking down some of the barriers that Dr Perry mentions. Consequently, the change strategies pursued by JDAM served as a practical comparison to the theory presented previously. In order to develop maximum benefit from this comparison, a basic methodology of interviewing in depth was used. The specific results of these interviews (presented in Appendix D) form the basis for the case study discussion presented later in this chapter.

### **Methodology**

#### **Organization Selection**

Time limitations forced the selection of a single case study. Therefore, JDAM was selected because of its successful implementation of acquisition reform. JDAM was one of four AF pilot programs participating in a Congressionally mandated acquisition reform test program, winning the AF Acquisition Lightning Bolt Award presented in December 1995.

## **Organization Background**

The JDAM program office was formed in 1994. It develops affordable, adverse weather, accurate guidance kits for 1,000 and 2,000 pound bombs carried on a variety of AF and Navy aircraft.<sup>1</sup>

**Acquisition Reform Results.** JDAM's results with acquisition reform thus far have been outstanding. They reduced the use of military specifications (see glossary) from 87 to 0. Also, product development time was cut from 64 months to 48 months. Most of all, JDAM achieved a total program savings of \$2.9 billion.<sup>2</sup>

**Unique Organization Characteristics.** Two things make the JDAM SPO different from other SPOs. First, as a pilot program, it had the opportunity to obtain relief from some acquisition rules and regulations. JDAM did submit some packages for statutory and regulatory relief, but received nothing to give them any distinct advantage over other AF SPOs.<sup>3</sup> The second unique characteristic involves having senior DOD level interest in the program. Being part of the pilot program offered the SPO visibility at the highest AF and DOD acquisition levels. Normally, only the largest SPOs, like the F-22 or C-17, have this kind of visibility. Finally, JDAM is relatively small, consisting of only 56 people. While the AF has other small SPOs, JDAM's size does not compare to the program offices that number from the low to middle hundreds.

## **Data Gathering Method**

Little open source information was available on how JDAM implemented acquisition reform. Therefore, interviews with SPO members were conducted.

**Sampling.** This study used purposive, stratified samples. Certain people played key roles in the change process, necessitating the need to interview them. Yet, their impact

varied according to management level, hence the requirement to stratify the sample. The purpose of the interviews was to find out what the SPO did to change itself from a leadership perspective. This meant talking with key leaders in the organization. However, it was also important not to underrepresent any level in the organization; each level may have different perspectives on the changes taking place. Therefore, the sample was stratified by: 1) the senior leaders (program and deputy program directors), 2) integrated product team (IPT) leaders, 3) group leaders, and 4) line workers. See Appendix B for the JDAM organization chart and the people selected for interviews.

Using ethnographic techniques of a small sample size, but interviewing in depth, 24% of the SPO were selected.<sup>4</sup> Table 2 summarizes the results.

**Table 2. Sample Selections**

<b>Organization Level</b>	<b>Total Members</b>	<b>Interviewed</b>
Program/Deputy Program Director	4 <sup>5</sup>	3
IPT/Deputy IPT	5	2
Group Leaders	9	3
Line Workers	41	6
<b>Total</b>	<b>59</b>	<b>14</b>

The heads of the business and product development IPTs were interviewed due to their critical positions. Subjects in the lower two tiers were chosen at random.

**Interview Technique.** A semi-structured interview method was used. This method consists of an interview guide of questions and topics. The semi-structured approach keeps the questioning focused, yet provides the freewheeling quality of an unstructured interview.<sup>6</sup> Since there was only one chance to meet with each person (again due to time and funding constraints), this method assured consistency among the interviews and

fostered open-ended responses at the same time. The interview guide (see Appendix C) was administered without alteration. It was piloted by using trial subjects at the division, branch chief, and line worker level at the Human Systems Program Office, Brooks AFB Texas. For the actual study, a combination of telephone and personal interviews were conducted.

## **Results**

Results of the case study are discussed using Lewin's framework. See Appendix D for a presentation of the data.

### **Unfreezing**

JDAM applied many of the unfreezing elements discussed earlier. The leadership placed considerable emphasis on urgency and vision. They also employed several methods to overcome initial resistance.

The organization's sense of urgency appeared strong. All respondents interviewed felt a high sense of urgency. Seven out of ten saw the SPO director as being the generator of this situation. However, the program director did not discount outside influences. He noted that the Deputy Undersecretary of Defense for Acquisition Reform pushed JDAM as a pilot program.

To help create this perceived crisis and chart a path for the future, the SPO also developed a clear, simple vision. They saw their primary aim as success as an acquisition reform program, with underlying principles of streamlining, best value for the dollar, and collaboration with the contractor. The leader developed this vision in concert with all SPO members, and it served as a key method to overcome initial resistance. All

respondents knew the purpose of the organization and its vision. Virtually the same description of the vision was given by all 14 people. The SPO achieved this high knowledge rate by communicating the vision through several methods: leadership emphasis at meetings, one-on-one contact, and public postings.

In addition to communicating the vision, the leadership employed several other methods to overcome initial resistance. The program director personally led the transformation. He removed traditional, but non-valued added, acquisition practices in a public manner. This showed people their mission was serious. Several people mentioned the leader as the “driving force” behind changing the organization. The leader also deliberately placed change agents in various work groups. Yet, this action was not obvious to the workers; except for the leader none of the other subjects mentioned the intentional placement of change agents in the SPO. Furthermore, the program director implemented a radical reorganization where government personnel teamed directly with competing contractors. Eleven people specifically mentioned the effect of this reorganization. It appeared to change the government role from obtrusive oversight to that of facilitator.

However, altering the management process was probably the largest contributor to overcoming initial resistance. Everyone interviewed commented on three practices applied in JDAM that they did not see applied (at least to the same degree) in other organizations. These practices were removing fear in the organization, setting and meeting high goals, and always questioning their practices and those of others. The leader set out to remove the fear of making mistakes, and his efforts seemed to work. A typical interview comment was: “If you’re not making mistakes, you’re not trying hard enough.” Also, the program

director deliberately challenged people by setting “stretch goals.” Stretch goals were standards out of reach with normal effort, but attainable with determination, initiative, and creativity. Those interviewed felt a keen obligation to meet these standards. Finally, because of the enormous amount of ingrained procedures and practices involved in acquisition, the leader instilled a questioning attitude across the organization. Some people stated such things as, “Why do we have to do it this way?” or “Why can’t we do it another way?” Always asking the question, “why?” has become a mantra within JDAM.

### **Movement**

Of the various ideas presented for moving an organization down the path of change, the personnel selection process, overcoming defensive reasoning, and empowerment, were the most applicable to JDAM. Other methods like training and the appraisal system were relevant, but less useful. Moreover, there was disagreement in the scope of change and whether to focus first on attitude or behavior.

Overcoming defensive reasoning seemed to be very important. It is difficult to gauge the degree of defensive reasoning in an organization without prolonged observation. Nevertheless, JDAM members seemed to apply Argyris’ productive reasoning. Ten people commented that they willingly challenged each other’s assumptions and logic. Also, ten subjects noted that management always explained the rationale behind sensitive decisions. Only one person said management did not explain decision rationale.

Besides productive reasoning, the program director used the personnel selection process. He interviewed people seeking positions in the SPO. His purpose was selecting people who would fit with his vision. The leader also released four or five people whom he thought would promote disruptive actions.

Empowerment seemed to have a positive effect, though agreement among those interviewed was not as strong as in the case of urgency and vision mentioned earlier. Eleven out of 14 people said empowerment was very important, and the senior leadership in particular felt that people needed a sense of “ownership” in the task they were accomplishing. However, the implementation of empowerment was not consistent throughout the organization. Eight people felt completely empowered, and four said the empowerment practiced in the SPO was good, but could be improved. One person declined to comment.

These minor discrepancies in measuring empowerment appear related more to definition than results. The most satisfied people defined empowerment as a “volume” (or set of boundaries) where one was free to make decisions, and where they agreed with the parameters set by management.<sup>7</sup> Those not completely satisfied had a different definition (like freedom from review) or did not have a clear idea of the boundaries of their empowerment volume. Despite these differences, the SPO’s success seems to suggest that while empowerment is necessary, you do not need complete agreement throughout an organization on the amount applied.

The training and appraisal systems appeared to be less useful than the above methods. The SPO used training; 50% of the respondents judged it very important. To them, the informal team building type training accomplished earlier in the program contained the most benefits. Whereas training was of some help, four people stated that the appraisal system had a somewhat negative effect on the change process. This was because the SPO did not control appraisals directly; functional organizations (like engineering and contracting) outside the SPO conducted final review and approval.

Results concerning the scope of change and whether to focus initial efforts on changing attitude or behavior split along senior management lines (program director) and lower level management lines (IPT leaders and below). Workers saw the need to change everything all at once and focus on peoples' attitudes first. Senior leadership, on the other hand, saw change concepts being implemented immediately, but results flowing incrementally. These results would in turn build upon one another and propel the SPO along the path of change. The senior leadership also saw their job as changing behavior first; they did not see how one could directly affect attitude. Still, attitude change was their long term goal.

### **Refreeze**

The SPO still appears to be in the movement stage; they have been working on the change process for only three years. Consequently, they have not placed great emphasis on overtly anchoring change. Still, the SPO employed two methods from the change strategy discussion, spreading success stories and measuring organization progress. The senior leadership also used two methods from unfreezing segment, creating a sense of urgency and altering management processes

The organization has made some effort to spread the word on success stories and measure their progress towards acquisition reform. Thirteen people mentioned the continual reinforcement of success helped people to stay on track. "Success breeds success," was a common statement. Also, the SPO practiced a qualitative and quantitative measurement process. Nine people noted the use of metrics to assess progress towards organizational goals. The senior leadership also mentioned qualitative assessments like management off-sites and management by walking around. In applying management by

walking around, the director would physically visit different parts of the SPO and talk with people to obtain a sense of the organization's climate. Furthermore, the program director actively solicited "report cards" on his and the SPO's performance from workers.

The most common methods used by JDAM to anchor change, though, came from the unfreezing segment. First, they continued their sense of urgency. When the new program director came in, he deliberately tried to re-energize the organization. To do this, he set a common enemy, another SPO that competes indirectly with JDAM on the same type of munition. The program director told the SPO they must do better than the enemy to remain in business.

Also, the program director continued to challenge the organization with high standards—a management process used initially to start the change process. These challenges were significant and well above what most organizations would consider reasonably attainable. For instance, the SPO developed a goal to cut 15 months off their schedule for obtaining a decision for Low Rate Initial Production (LRIP). Many program offices would consider merely meeting their schedule for LRIP a tough goal.

Results thus far indicate the SPO's selection and employment of change strategies is working well, with a small caveat. The organization has gone from over 50% resistance to change initially to most people rating it at less than 25% now. Also, the SPO has been very successful in terms of the cost and schedule savings mentioned earlier. Still, room for improvement exists. Two people mentioned the organization reverts back to old business practices on occasion. One individual declared the SPO had, "Fallen down on institutionalizing change." Furthermore, the resistance to change is not negligible. Although seven said there was virtually no resistance to change, four put resistance at

around 10% to 20% and one person said it was over 50%. Clearly the organization does not speak with the same unanimity here that it did on other issues.

### Notes

<sup>1</sup>“Pilot and Lead Programs,” 1996, n.p.; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq-ref/progs>.

<sup>2</sup>Department of the Air Force, *Air Force Acquisition Reform*, April 1996, 11.

<sup>3</sup>Lt Col McClendon, Deputy Director JDAM System Program Office, interviewed by author, 24 December, 1996.

<sup>4</sup>Russell H. Bernard, *Research Methods in Anthropology* (Walnut Creek, CA: Alta Mira Press, 1994), 79.

<sup>5</sup>JDAM has had two Program Directors. Mr Terry Little led the organization from the start of the reform process to January 1996. Mr Oscar Soler took over from Mr Little and presently holds the position. Both were interviewed for the case study. In addition, the SPO has two deputy directors, one AF and one Navy, since it is a joint program. Only one of them was interviewed.

<sup>6</sup>Bernard, 209.

<sup>7</sup>The term “volume” was mentioned by several of the people interviewed. By volume, they meant a set of boundaries for an individual’s level of empowerment.

## Chapter 4

### Recommendations

*Americans will always do the right thing after having first exhausted all other alternatives.*

—Winston Churchill

A major objective of change strategies is to avoid nonviable alternatives in pursuing organizational change and instead use the correct approach from the start. Proper application of these strategies requires two types of recommendations. The first set of recommendations provides suggestions for organizations undergoing change for acquisition reform. The second set offers research proposals to fill gaps in the current study.

### Organizational Change Core Competencies

Delineating a list of recommended change strategies would misinterpret the results of the case study. While JDAM applied some strategies, they did not use others. In addition, they tailored strategies to fit the JDAM situation. For instance, they used urgency to foster **and** maintain change. For the most part the methods and concepts previously discussed are a means to achieve larger goals. But what works in one situation may not work in another.

Nevertheless, in comparing JDAM practices with possible change strategies, several required organizational capabilities stand out: urgency, vision, high standards, teamwork, and innovation. You will not see a one-to-one correspondence of these capabilities with each change strategy discussed in chapter two. Furthermore, they do not fall discretely into a particular element of Lewin's model; they overlap among the three elements. Nor should a leader apply these capabilities in some specified order; they complement each other in a synergistic fashion. Rather, the leader should employ change strategies as appropriate to achieve these five competencies. An organization must do all of them well, all of the time. In short, they are core competencies for organizations undergoing change for acquisition reform.

### **Creating Urgency**

Organizations must develop and maintain a razor sharp edge. Research points to using urgency to kick start the change process. JDAM took it a step further and used an organizational sense of urgency to maintain its focus. Creating an outside competitor and promulgating success stories helped keep JDAM working at its limits.

### **Communicating Vision**

Vision is another critical item in change strategy and one done well by JDAM. They developed a clear vision and communicated it well. Everyone interviewed had virtually the same vision description, and this helped create a sense of purpose. In talking with these people one got the sense of dealing with an elite acquisition team.

## **Setting and Meeting High Standards**

JDAM senior leadership deliberately set high standards as part of this management process. While the research does not specifically address this idea, it had a powerful effect on the SPO. The leadership not only set high goals, but expected people to meet them. This expectation was mutual; workers, too, expected to meet the standards. One might consider empowerment related to high standards in that it enables people to meet them. However, empowerment by itself is not a core competency. While people in JDAM agreed empowerment worked well, they did not agree on how well. The leader must practice empowerment to the level needed to meet organizational goals, but does not necessarily mean everyone should feel completely empowered.

## **Teamwork**

JDAM used a type of teamwork where everyone to worked together for a common goal, but strongly and professionally debated the means to achieve the goal. They operated in family atmosphere that embraced differences of opinion. JDAM personnel were willing to challenge one another on thoughts and ideas and use peer pressure to push people forward. This inevitably led to disagreements, but like families individuals pulled together when needed. The change strategies of managing the personnel selection process and using team building training were only the means used to achieve this competency; they are probably not the only methods that will work. JDAM's method of teamwork provides an interesting contrast to teams that outwardly work towards a common goal, yet sometimes avoid underlying differences to get the job done

## **Constant Innovation**

Innovation is one of the enablers to achieving high standards and developing the level of teamwork mentioned above. Its inclusion as a core competency may be a reflection of the new thinking required for acquisition reform. However, it appeared critical to JDAM success. Their organizational penchant for questioning everything served as a prelude for innovative ideas. During the interviews the senior leadership emphasized the necessity of “thinking outside the box.” One example is the application of the reorganization. The type of reorganization used by JDAM may or not may not work for other SPOs. Reorganization as a change strategy may not even be a good idea in many cases. The important consideration is the leader of JDAM analyzed his circumstances and made a bold, but appropriate move to change the SPO structure.

## **Recommendations for Further Research**

The main contention of this study is that no fundamental check list of strategies exists, but that there are a certain set of core competencies that an organization must possess to achieve effective organizational change. However, this conclusion is based on the comparison of one organization with the literature on organizational change. To determine the validity of this assertion, additional research would need to: 1) study more organizations, 2) thoroughly vet proposed competencies, and 3) determine **how** to achieve these competencies.

Further research would need to investigate more organizations using statistically sound practices. This would include random sampling and the selecting SPOs of different

sizes and states of organizational maturity. Such methods would put a more definitive stamp on any research findings.

Also, the above investigation should test whether suggested core competencies hold true among various SPOs. The framework may not prove sound, or it may need changes, additions, or deletions. If the framework is not valid, new studies should provide another model. The acquisition community needs some guidance for leaders struggling with reform.

Finally, whether new research uses the proposed model or advocates a new one, it should provide more examples of execution. Again, an inflexible step-by-step approach is probably a bad idea. However, the current study mentions little on how to promote innovation or create a highly functional team. Leaders need some ideas to help them implement aspects of any proposed organizational change model.

## Chapter 5

### Conclusion

*Better for most of us to start learning now how to cope with change, to develop whatever leadership potential we have, and to help our organizations in the transformation process.*

—John P. Kotter  
*Leading Change*

This study has recommended some core competencies for organizations undergoing change to implement acquisition reform. While the DOD has achieved some success in reform, the breadth, depth, and pace of change have not been consistent. Acquisition reform principles require big changes in the way organizations do business. Initiating and fostering such large change is difficult at the organizational level. The suggested core competencies, drawn from a comparison of several possible change strategies with successful acquisition reform in the JDAM program office, should help leaders in their change efforts.

Change strategies were discussed in terms of Lewin's framework of organizational change: unfreezing the system, movement towards a new orientation, and refreezing new behaviors and attitudes. To unfreeze organizations, leaders create a sense of urgency, communicate a new vision, and use various organizational and management tools to overcome initial resistance. Once they start the process, the leader causes movement through a variety of means. Human resource methods, like promotions and appraisals,

reward behavior that promotes change. Training and education provide necessary skills. Some strategies also call for empowerment and the use of productive reasoning to involve people in the process and rid them of their personal biases. Finally, organizations institutionalize change by employing techniques grouped under three major categories: grafting the new culture to the old, maintenance and evaluation of the process, and the continued use of the methods in the movement stage.

JDAM applied some of the strategies presented, but adapted them to fit their situation. Key features of the JDAM application included: creating a sense of urgency, communicating a vision, altering key management processes, and attempting to overcome defensive reasoning. They used these methods in a synergistic fashion, cutting across all three stages of Lewin's model and tailoring them in ways not addressed by the literature. To a lesser degree, they also applied empowerment, selective personnel decisions, training, and reorganization. In addition, they measured their progress towards their change goals. However, these methods appeared to play a supporting role to the key features mentioned above.

Based on comparing possible change strategies with the JDAM experience, a simplistic application of a list of change strategies misses the fundamental requirement for change. A particular strategy that works in one situation may not work in another. However, the results of the study suggest that there are overarching core competencies for successful organizational change. Developing and maintaining a sense of urgency helps organizations keep their fighting edge. Communicating a vision provides the right focus for the energy that results from urgency. Setting and meeting high standards ensures the organization does not become complacent. Building teams where people disagree, but

pull together when needed, helps with urgency and meeting high standards. Finally, innovation is an important ingredient for fostering creative teamwork and keeping the organization flexible intellectually. The leader must combine these competencies in a synergistic fashion and practice them constantly.

When asked about the challenge of implementing acquisition reform, Dr Perry (former Secretary of Defense) stated, “Why can I presume that this time the call for reform will succeed? Well, the first answer, of course, is that we cannot be sure. It is a daunting task. To change in a fundamental way a system as large as this and a system which is so ingrained after for decades of development will be difficult.”<sup>1</sup> Hopefully, the core competencies proposed here will provide the leader a framework useful for accomplishing this imposing task.

### **Notes**

<sup>1</sup>Robert H. Williams, “Dr Perry Urges Radical Surgery for Acquisition,” *National Defense* 78, no. 495 (February 1994): 12.

## Appendix A

### Air Force Lightning Bolt Initiatives

The AF has implemented acquisition reform and the above principles largely through its Lightning Bolt initiatives. The AF has set some pretty drastic goals for streamlining, to include: reducing acquisition cycle time by 50%, reducing program office manning (in some cases by 50%), and improving the Request for Proposal (RFP) process.<sup>1</sup> Reducing regulations, developing a single set of consistent policies and the use of training and support teams to ensure programs use best business practices are also important AF themes.<sup>2</sup> The specific Lightning Bolts are listed below.

**1. Establish a centralized support Team to streamline all contract solicitations valued at over \$10 million.<sup>3</sup>**

The purpose of this team is to institutionalize acquisition reform. Similar teams will be established at each Product and Logistic Center to scrub solicitations valued at between \$100,000 and \$10,000,000.

**2. Create a standing Acquisition Strategy Panel (ASP) composed of senior level acquisition personnel from SAF/AQ, AFMC, and the users.**

The goal of this Lightning Bolt is to promote consistency among acquisition strategies, tailored as needed to the specifics of the program under consideration.

**3. Develop a new program office manpower model that uses the tenets established in the streamlined management of classified programs.**

This model is based on acquisition strategies that use the prime contractor as the system integrator and achieves a reduction in program office size of at least 50 percent, including contracted support personnel.

**4. Cancel all Air Force Materiel Command (AFMC) Center-level acquisition policies by December 1, 1995.**

The Secretariat, Air Staff, and HQ AFMC will be the only agencies authorized to issue acquisition policies, instructions, or guidelines, including supplements to the Federal Acquisition Regulations.

**5. Reinventing the Air Force oversight and review process.**

The goal is to have a paperless decision process and convene a formal review only if there is disagreement within the program's working-level Integrated Process Team (IPT). SAF/AQ will lead the IPT with membership from the Secretariat, Air Staff, and HQ AFMC.

**6. Enhance the role of past performance in source selections.**

HQ AFMC led an IPT to revise our policy on the use of past performance in source selections so that it is co-equal with technical, management, and cost proposals.

**7. Replace acquisition documents with the Single Acquisition Management Plan (SAMP).**

A SAMP will replace numerous other documents such as acquisition plans, program management plans, and acquisition strategy reports required for milestone reviews.

**8. Revise the Program Executive Officer and Designated Acquisition Commander portfolio review to add a section that deals specifically with acquisition reform.**

The program Managers will develop metrics to track implementation of acquisition initiatives. Metrics will capture specific reform activities occurring in each program.

**9. Enhance our acquisition workforce with a comprehensive education and training program that integrates acquisition reform initiatives.**

HQ AFMC is leading an IPT to develop a comprehensive formal education and training program for the acquisition workforce. This training program will ensure individuals have the knowledge, skills, abilities, and experience needed to perform in and environment of reformed processes with a smaller workforce.

**10. Reduce acquisition cycle time by 50%.**

Phase 1 seeks to reduce the time from a validated user requirement until a contract is awarded by 50%. Phase 2 will attempt to cut down on cycle time after contract award.

## **11. Streamline Science and Technology contracting.**

Improved business processes and lessons learned in acquisition of weapon systems will be applied to our science and technology efforts. Common process will become the standard across all laboratories.

### **Notes**

<sup>1</sup>Assistant Secretary of the Air Force (Acquisition), "Air Force Acquisition Lightning Bolt Initiatives," 1996, n.p.; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq-ref/bolts/update.html>.

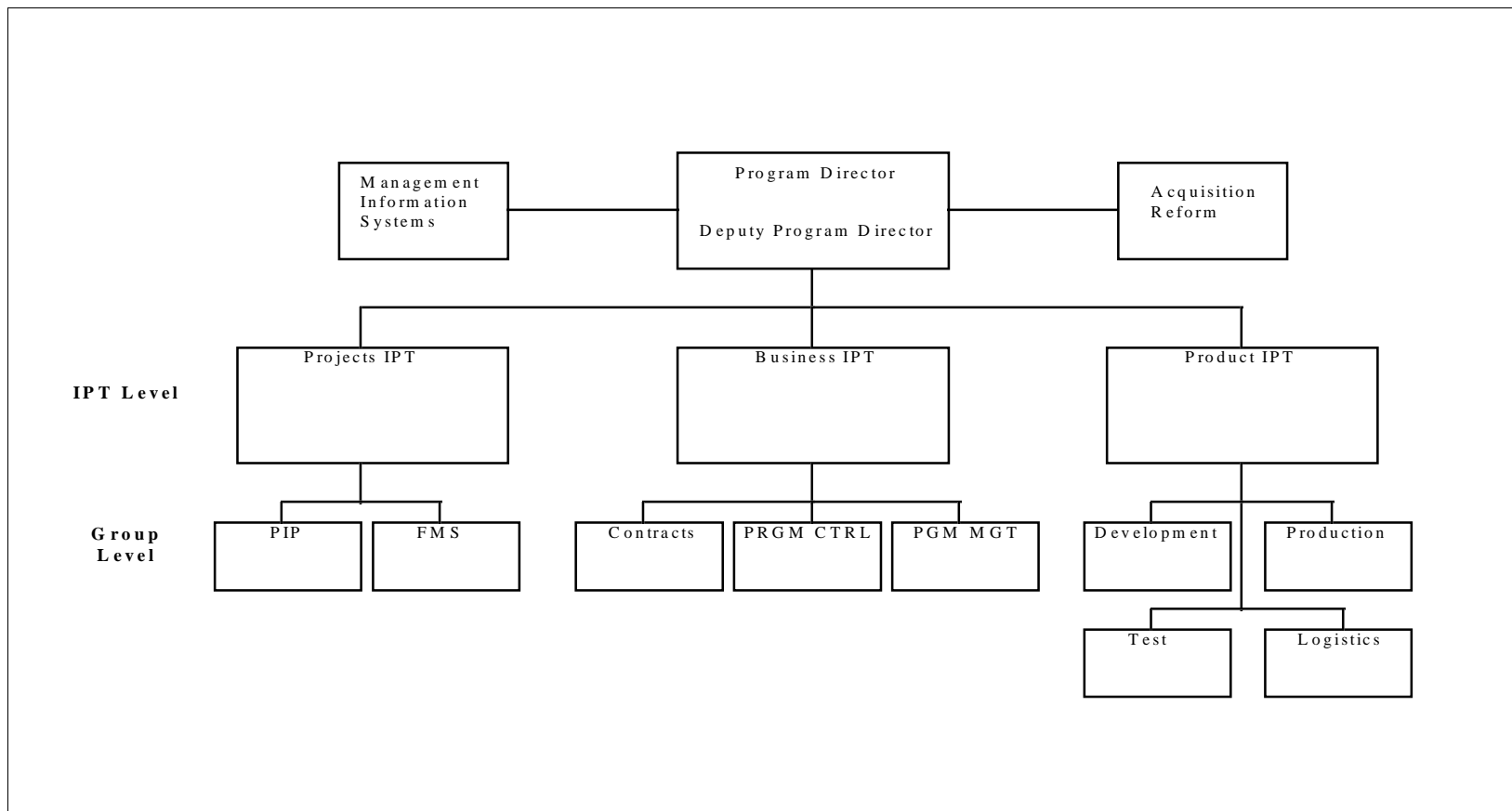
<sup>2</sup>Darleen Druyun, "Acquisition Renaissance A Cultural Change in Work," address to the American Institute of Aeronautics and Astronautics, 17 October 1996, n.p.; on-line, Internet, 3 December 1996, available from <http://www.safaq.hq.af.mil/acq-ref/std-dwn/culture.pdf>.

<sup>3</sup>For all information on the AF Lightning Bolts, see Department of the Air Force, *Air Force Acquisition Reform*, April 1996.

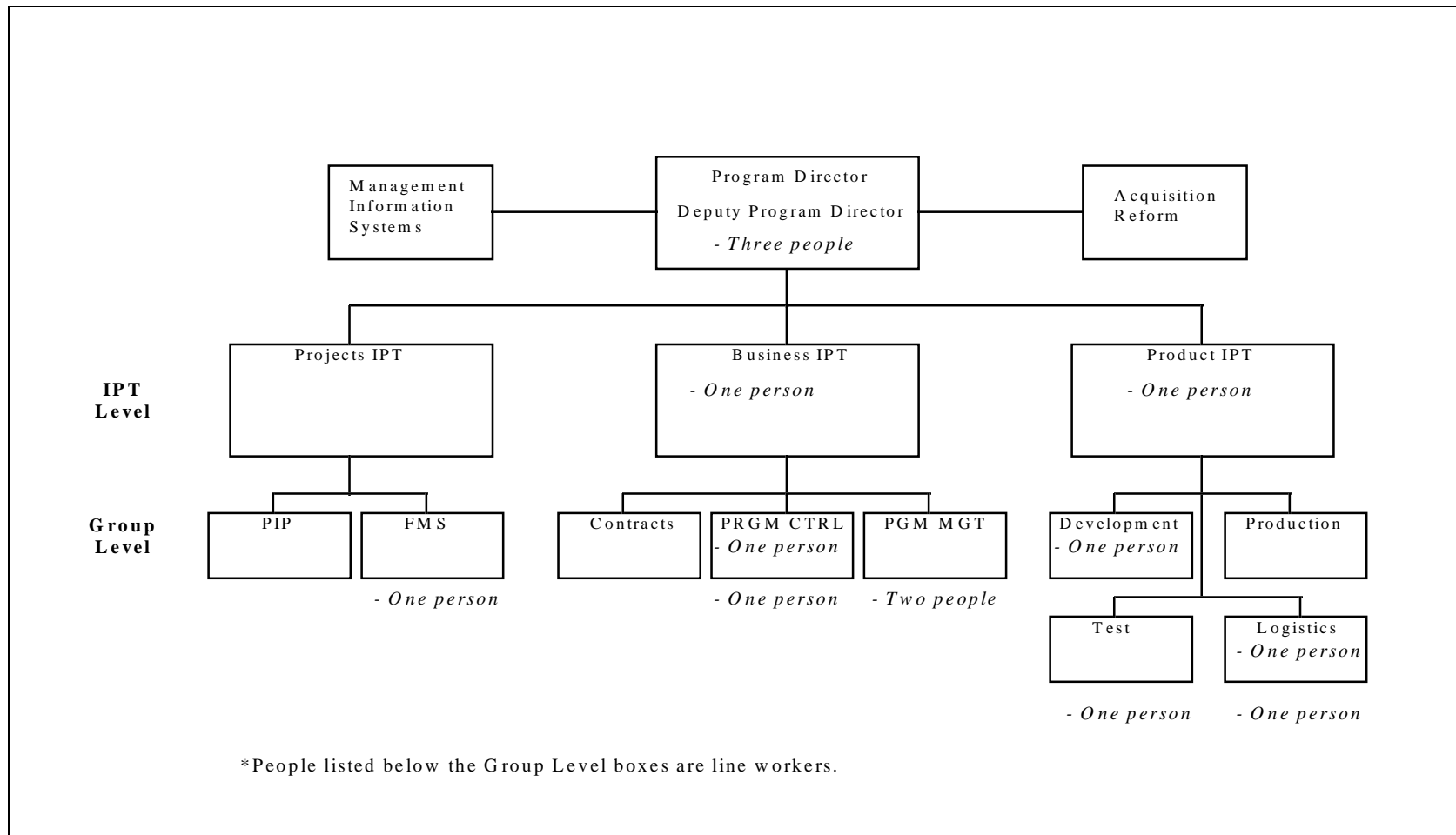
## **Appendix B**

### **JDAM Organization**

The following figures illustrate the JDAM organization. Figure one shows the basic organizational structure. Figure 2 indicates the location in the organization for each interview respondent.



**Figure 1. JDAM Organization Chart**



**Figure 2. JDAM Interview Selections**

## **Appendix C**

### **Interview Guide**

1. How did the change process start? Emphasize: As applies to acquisition reform.

a. Was the change necessary or required? Why? (crisis/urgency)

When did it start?

Was resistance encountered?

If resistance was encountered, what percent was encountered by the SPO?

b. Vision (to include goals and objectives)

Do you have a vision statement? (for the SPO)

What is it? When was it accomplished?

If not, does the SPO use any other methods to convey the organization's purpose and goals?

What methods have been used to communicate the vision?

What has been the reaction of the SPO to the vision?

Have there been any inconsistencies between the vision and SPO actions or policies?

If so why? What has been done to explain or resolve the inconsistencies?

c. Has the SPO done any of the following to mobilize commitment (give examples)?

Continuously communicate vision

Building coalitions and networks (altered work team compositions)

Establishing dedicated groups(s) to move out on change (Who participates?)

Distributing resources for alignment with new way of doing business

Reorganization

Altering or establishing key management processes

2. What are the methods you've used to implement and energize organizational change? What has worked well? What hasn't worked well?

a. Has the SPO used any of the following HR methods: promotion, selection, rewards, appraisal system?

b. Has the SPO done any education and training? What types?

How often does training take place?

Does follow up training (to include on-the-job) occur?

Under what circumstances?

c. How do you feel about the concept of empowerment?

Has SPO use empowerment to help change process?

How?

How do you think empowerment is working out?

d. Consider a continuum of making incremental changes versus a lot of change all at once. Where does the SPO fit on this continuum?

e. Defensive reasoning

What process is used to make decisions? (at your level of decision making)

When implementing difficult changes or decisions, did any one complain,  
show reluctance, or exhibit negative feelings?

How was this handled?

When decisions are made, does management explain them?

Does management ever give orders or taskings without telling why?

f. In a change process like the SPO's undergone, what comes first, changing attitude or changing behavior? Behavior is the outward actions or thoughts of an individual. Attitude represents an individual's inner most basic assumptions, primarily existing at unconscious level.

What path has the SPO taken?

3. Has the SPO institutionalized organizational change? (Practices, processes, attitudes firmly ingrained, taken for granted)

a. Grafting: Has SPO done any of the following?

Celebrations

Eulogizing past culture

b. Maintenance and evaluation

Has the SPO done any of the following?

Articulated the connections between new behaviors and organizational success
Spread the word on success stories (oral, written, electronic)
Held meetings to assess progress of change
Made examples, either positive or negative, of certain practices or procedures
Give rewards, promotions, high appraisals based on contributions to organizational change

How often is this done?

Under what circumstances?

Has vision been refined since process started?

If not, any plans to?

Does the SPO try to measure change?

What and how?

c. Does SPO make use of the informal organization (networks) to facilitate change?

Describe use

How often is this used?

d. Rating change

Rate the SPO's cultural change on a percentage basis (100% is complete transformation)

## **Appendix D**

### **Interview Results Matrices**

The data on the following pages show the results of the interviews conducted at the JDAM program office. The data is presented in terms of organizational change methods and concepts versus management level. Showing the data in matrix format helps indicate patterns in change strategies used by JDAM as people at various levels in the organization viewed them.

The matrices display the data from two levels, organizational change and management level. Each matrix reflects a different stage of organizational change: unfreezing, movement, and refreezing. Within each matrix the columns indicate various change methods and concepts. They include items from the interview guide as well as other ideas that came out during the interviews. Some of these methods and comments have levels of degree, and some are yes or no responses. The rows show the management levels in JDAM (see Appendix B).

Data include table entries and their associated notes. Each “X” represents a response or comment from a subject about a particular category. Some entries have notes that provide further amplification. Note, the number of entries in a category may not add up to the total number of people interviewed; not everyone responded to all areas.

**Table 3. Unfreezing Data Matrix - Part A**

	Crisis/Urgency									
	Level			Source		Resistance Level (%)				
Level/# people	High	Medium	Low	Internal	External	75-100	50-74	25-49	5-24	<5
Program Director/3	XXX <sup>a</sup>			XXX <sup>b</sup>			X <sup>c</sup>		X <sup>d</sup>	
IPT Leaders/2	XX			X	X		X			
Group Leaders/3	XXX			XX		X			X <sup>d</sup>	
Line Workers/6	XXXXX X			X	XX	X	X	XX <sup>d</sup>	XX <sup>d</sup>	

**Table 4. Unfreezing Data Matrix - Part B**

	Vision												Mobilizing Commitment				
	Knowledge Level			Methods Conveyed					Inconsistencies				Methods				
Level/# people	High	Med	Low	Meetings	Docu- mented	Personal Contact	Posted	Elec- tronic	Yes	No	Explain	Ignore	Vision	Coalitions	Lead Group	Reorg	Alter Mgt Process
Program Director/3	XXX <sup>e</sup>			XX	X	XX	X	X	X		X		XXX	XX <sup>g</sup>		XX <sup>h</sup>	XXX <sup>i</sup>
IPT Leaders/2	XX			XX		XX	X		XX		XX <sup>i</sup>		XX	X		X	XX
Group Leaders/3	XXX			XXX	XX	X	X		X			X	XXX			XXX	XXX
Line Workers/6	XXXXX	X		XXXX	XXXX		XXXX		XX	X	XX		XXXX XX			XXX XX	XXXXX X

<sup>a</sup>Deliberately identified common enemy (example: Guided Attack Munition program) in competition with. Kept sense of urgency in organization.

<sup>b</sup>SPO director advocated using JDAM as pilot program. Also, some urgency at OSD level; Deputy Undersecretary of Defense for Acquisition reform, Colleen Preston, pushed idea of JDAM as pilot program.

<sup>c</sup>Tremendous resistance encountered (initially and currently) from OSD and other staffs, though senior leadership is on board. OSD senior leadership provided “top cover.” for JDAM reform initiatives.

<sup>d</sup>Those rating organization change 50% or less joined the organization at least several months after it started its reform efforts in earnest.

<sup>e</sup>Broad vision was simple: Success as acquisition reform effort and transformation entire buying process. However, set short term goals (2 years max) for people to chart progress. Some common principles that came out in interviews:

- Streamline and value added work & processes.
- Best value for dollar.
- Collaboration with contractor: a true team.

<sup>f</sup>No inconsistencies on important matters—“have to pick fights.”

<sup>g</sup>SPO director deliberately picked change agents (“zealots”) and matched them to certain teams within organization.

<sup>h</sup>SPO director used radical reorganization that closely tied government personnel with two contractors competing for JDAM; job of government personnel was to help their contractor win. One respondent said SPO was “organized for success.”

- At major point in program (downselect to one contractor), SPO again reorganized to reflect new thinking. For instance, instead of being independent as usual, contracting was put in the business IPT to make them a better part of the SPO team.

<sup>i</sup>SPO director created new environment that significantly changed overall management philosophy and practices. Virtually every person interviewed commented on the following aspects:

- Challenged people by setting “stretch” goals; these goals viewed (by both sides) as higher standard. People talked of being challenged directly by SPO Director to “think outside the box.”
- No fear of making mistakes (“if you’re not making mistakes, you’re not trying hard enough”). Note SPO director received support and empowerment from his leadership and highest Office of Secretary of Defense (OSD) levels.
  - SPO director set example of leading edge thinking and setting high standards. For example, he backed and achieved the deletion of all military specifications. This sent a message to the SPO that the reform initiative was serious.
- Mantra of SPO was to challenge the status quo by **always** asking why? Why do we need to do it this way? What is the value added? Etc. **Everything** is challenged.

**Table 5. Movement Data Matrix - Part A**

	HR Methods				Education & Training						
	Types Used				Types		Amount/Importance			Recurring	
Level/# people	Promotion	Selection	Rewards	Appraisals	Informal	Formal	High	Medium	Low	Initially	Currently
Program Director/3		XXX <sup>b</sup>		x <sup>a</sup>	XXX <sup>d</sup>	XX <sup>e</sup>	X	X		XX	X
IPT Leaders/2	x <sup>a</sup>	XX	X <sup>c</sup>	x <sup>a</sup>	XX			XX		X	X
Group Leaders/3		XXX		x <sup>a</sup>	XX	XX	XX		X	XX	XX <sup>f</sup>
Line Workers/6		XXXX		x <sup>a</sup>	XXXX XX	XXXX	XXXX			XXXXX X	XXXXX X <sup>f</sup>

**Table 6. Movement Data Matrix - Part B**

	Empowerment							Scope of Change			Defensive Reasoning					Attitude & Behavior	
	Importance			How Well Doing				Pace			Challenging Each Other			Decisions Explained		Which Comes First?	
Level/# people	High	Med	Low	Excellent	Good	Average	Poor	Incremental	Middle	All at Once	High	Med	Low	Yes	No	Attitude	Behavior
Program Director/3	XX <sup>g</sup>			X	X <sup>i</sup>			XX <sup>j</sup>			X			X			XXX
IPT Leaders/2	XX			X	X <sup>i</sup>					X	XX <sup>k</sup>			XX		XX	X <sup>l</sup>
Group Leaders/3	XXX			XX	X <sup>i</sup>					X	XXX			XXX		XX	X
Line Workers/6	XXX X			XXXX <sup>h</sup>	X					XXXX XX	XXX X			XXX X	X	XXXXX	

<sup>a</sup>Appraisal & promotion system seemed to work against SPO. SPO had input, but final decisions made by functional chain (engineering, contracting, etc.) outside of SPO.

<sup>b</sup>SPO director purposely “fired” 4 or 5 people who were disruptive influences. He also picked people for key positions and interviewed people for SPO job openings.

<sup>c</sup>Had small organization rewards. Also attempted to obtain “pay for performance” where each employee receives certain percentage of cost savings. This idea did not come to fruition and it “let the wind out of the sails of some people.” However:

- Organization still vigorously setting challenges and high standards.
- Most people (5/7) seemed to think “pay for performance” no longer an issue—not really expect it in first place.

<sup>d</sup>Used team building, off-sites; contractors were included.

<sup>e</sup>Used formal courses like Motorola’s “Six Sigma Training.”

<sup>f</sup>Training is still done, but now it is at a decreased level. Also, informal training continues (like team building), but trend appears to be towards formal training in functional areas (like engineering, contracting, etc.).

<sup>g</sup>SPO director said “must have empowerment.” People must have “sense of ownership.” SPO director felt empowered by his chain of command. Idea of “top cover” resurfaced in several interviews.

<sup>h</sup>While some empowerment results were mixed (see note i), others felt completely empowered.

<sup>i</sup>Some SPO surveys indicated mixed results on level of empowerment in organization. Senior leadership felt this was more matter of perspective. In other words, what is one’s definition of empowerment. Some subjects also commented on this issue.

- One subject declined to comment on empowerment and its implementation.

<sup>j</sup>SPO director instituted change philosophy across-the-board initially. However, change was incremental from a personal and results level. As SPO experienced success, the process grew rapidly; more “passive” people got on board and the positive results accelerated.

<sup>k</sup>Willingness to challenge each others assumptions and logic stood out in interviews. This agrees with the SPO’s general practice of asking “why?.”

<sup>l</sup>Must work on attitude and behavior at the same time.

**Table 7. Refreezing Data Matrix - Part A**

	Grafting					Maintenance & Evaluation							
	Celebrations			Eulogy		Methods							
Level/# people	High	Med	Low	Yes	No	Stories	Qualitative Measures	Quantitative Measures	HR Methods	Training	Vision/ Goals	Networks (People)	Other
Program Director/3	X					XX	XX <sup>b</sup>	X			X <sup>f</sup>		X <sup>i</sup> X <sup>g</sup> X <sup>h</sup>
IPT Leaders/2	X <sup>a</sup>					XX	XX <sup>c</sup>	XX <sup>d</sup>			X <sup>f</sup>		XX <sup>g</sup>

Group Leaders/3						XXX <sup>c</sup>		X				X <sup>i</sup>	XX <sup>g</sup>
Line Workers/6	X					XXXXXX		XXXXX					X'XXX XX <sup>g</sup>

**Table 8. Refreezing Data Matrix - Part B**

	Current Assessment				
	Resistance Level				
Level/# people	75-100	50-74	25-49	5-24	<5
Program Director/3		X <sup>k</sup>			X
IPT Leaders/2				X	
Group Leaders/3				X	XX
Line Workers/6				XX	XXXX

<sup>a</sup>Workers “take pride” in accomplishments. Realize they are viewed by many outside organizations as special.

- Informal meetings also held to assess organization’s progress.

<sup>b</sup>SPO director assesses organization through management by walking around. Also holds closed door quarterly meetings where he asks individuals to provide a report card on him and the SPO.

<sup>c</sup>SPO holds offsites at various levels and times to assess organization’s progress towards goals.

<sup>d</sup>SPO has conducted surveys on organizational concerns and climate. It also uses metrics to regularly check progress towards acquisition reform goals.

<sup>e</sup>A number of people commented on “success breeding success.”

<sup>f</sup>Broad vision has not changed substantially, but subgoals have changed to keep pace with maturity of the program.

<sup>g</sup>SPO continually challenges itself at all levels (organization, small group, personal) by setting high goals. These high goals reinforce innovation & acquisition reform principles—they’re needed to meet the goals. Evident in nearly every subject.

- Higher level staffs (AFMC, OSD) continue to request the SPO use old ways of doing business. The IPT leaders view this as an impediment and waste of resources. Workers at the lower levels, though, seemed to take these road blocks as a challenge.

<sup>h</sup>Both former and current SPO director talked about the need for continuity and consistency.

<sup>i</sup>Respondents thought organization had fallen down somewhat on institutionalizing change. When pressure mounts, some individuals tend to slip back to old ways. Said executing program versus acquisition reform has become primary goal.

- Most other people interviewed still saw being a leader in acquisition reform as a fundamental goal and were motivated by this goal.

<sup>j</sup>Peer pressure from key people.

<sup>k</sup>Felt resistance higher now because program is past some key hurdles and views itself now as in “execution mode.”

\*Final Note: Most people did not see a deliberate attempt to anchor change. Several pointed out that the personnel selection process ensured change from the beginning and that the organization was “designed for success.”

## *Glossary*

AF	Air Force
AFMC	Air Force Materiel Command
AIAA	American Institute of Aeronautics and Astronautics
CEO	Chief Executive Officer
DOD	Department of Defense
FMS	Foreign Military Sales
HQ	Head Quarters
HR	Human Resources
IPT	Integrated Product Team
JDAM	Joint Direct Attack Munition
LRIP	Low Rate Initial Production
PGM MGT	Program Management
PRGM CTRL	Program Control
RFP	Request for Proposal
SAF/AQ	Undersecretary of the Air Force for Acquisition
SPO	System Program Office

**Designated Acquisition Commander.** Individual who performs the same functions as the program executive officer (PEO) on programs that are not assigned to a PEO, primarily the commanders of product centers. For acquisition program activities, DACs, like PEOs, are accountable to the Air Force acquisition executive.

**Low Rate Initial Production.** Producing the minimum quantities necessary to provide production configured or representative articles for operational test, establish an initial production base for the system, and permit an orderly increase in the production rate for the system.

**Integrated Product Team.** Teams composed of representatives from all appropriate functional disciplines working together with a Team Leader to build successful and balanced programs, identify and resolve issues, and make sound and timely decisions. The purpose of IPTs is to make team decisions based on timely input from the entire team, including customers and suppliers.

**Military Specifications.** Documented requirements for materials, products, or services to be developed for the military.

**Program Director.** Program manager vested with full authority, responsibility, and resources to execute an approved acquisition program on behalf of the Air Force. For acquisition related matters, the Program Director is accountable to the program executive officer or the designated acquisition commander. Also called System Program Director.

**Program Executive Officer.** Corporate operating official who supervises a portfolio of mission-related acquisition category I and selected programs. The PEO is accountable to the Air Force acquisition executive.

**Program Office.** See System Program Office

**Request for Proposal.** Formal vehicle by which the government describes requirements for goods or services and solicits proposals to fulfill requirements.

**System Program Office.** The integrated AFMC organization responsible for cradle-to-grave military system management.

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